DOCKET FILE COPY ORIGINAL

[redacted]

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
1998 Biennial Regulatory Review --	)	
Conducted Emissions Limits Below 30 MHz	)	ET Docket No. 98-80
for Equipment Regulated under Parts 15	)	
and 18 of the Commission's Rules	)	

INTRODUCTION

Intel Corporation is pleased to provide the following comments on the Commission's proposal to adopt CISPR 22 limits for power line conducted emissions from digital devices. Intel believes that this rule change would further progress towards the goal of 1 Standard, 1 Test, Supplier's Declaration of Conformity (1ISDOC).

DISCUSSION

Intel Corporation designs products for the international marketplace. CISPR Publication 22 has become the international standard for controlling electromagnetic interference from information technology equipment (ITE). Under the current FCC Rules, Section 15.107(e)[1], a manufacturer has the option of using the CISPR 22 limits for power line

[1] (e) As an alternative to the conducted limits shown in paragraphs (a) and (b) of this section, digital devices may be shown to comply with the standards contained in the First Edition of CISPR Pub. 22 (1985), "Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment," and the associated Draft International Standards (DISs) adopted in 1992 and published by the International Electrotechnical Commission as documents CISPR/G (Central Office) 2, CISPR/G (Central Office) 5, CISPR/G (Central Office) 9, CISPR/G (Central Office) 11, CISPR/G (Central Office) 12, CISPR/G (Central Office) 13, and CISPR/G (Central Office) 14.

conducted emissions. If a manufacturer chooses to use these limits, the manufacturer must also use

- the CISPR 22 limits for radiated emissions up to 1000 MHz and,
- if necessary, the FCC limits for radiated emissions above 1000 MHz.

Given the international nature of the marketplace, most system level products produced by Intel are already tested to the limits contained in CISPR Publication 22.

Changing the limits for power line conducted emissions in §15.107(a)[2] and §15.107(b)[3] to agree with those contained in CISPR Publication 22 is a proper step towards

---

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 USC §552(a) and 1 CFR Part 51. Copies of these CISPR publications may be purchased from the American National Standards Institute (ANSI), Sales Department, 11 West 42nd Street, New York, NY 10036, (212) 642-4900. Copies may also be inspected during normal business hours at the following locations: (1) Federal Communications Commission, 2025 M Street, NW, Office of Engineering and Technology (Room 7317), Washington, DC, and (2) Office of the Federal Register, 800 N. Capitol Street, NW, Suite 700, Washington, DC. In addition:

(1) The test procedure and other requirements specified in this Part shall continue to apply to digital devices.

(2) If the conducted emissions are measured to demonstrate compliance with the alternative standards in this paragraph, compliance must also be demonstrated with the radiated emission limits shown in §15.109(g) of this Part.

[2] (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 450 kHz to 30 MHz shall not exceed 250 microvolts. Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

[3] (b) For a Class A digital device that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power

harmonizing the FCC limits for electromagnetic emissions from digital devices with the widely accepted international standard for such emissions. Harmonizing standards results in lower cost of demonstrating compliance for manufacturers by reducing duplicate testing of products. This lower cost can then be passed on to the consumers of the product.

RECOMMENDATION

Intel Corporation recommends that the proposed changes to the FCC Rules be adopted as stated in the NPRM.

CONCLUSION

Intel Corporation is pleased with the proposed change to the Commission's Rules. This change is in line with our stated support for the worldwide concept of 1 Standard, 1 Test, Supplier's Declaration of Conformance (1 1SDOC). We thank you for this opportunity to comment on this proposed change to the Rules.

---

line on any frequency or frequencies within the band 450 kHz to 30 MHz shall not exceed the limits in the following table. Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals. The lower limit applies at the band edges.

Frequency of Emission (MHz)	Conducted Limit (microvolts)
0.45 - 1.705	1000
1.705 - 30.0	3000

Dated: December 23, 1999

Ghery S. Pettit, NCE
Corporate EMC Engineer
Corporate Product Regulations
Intel Corporation
(253) 371-5515